INCREASING HEAD-DISK INTERFACE RELIABILITY USING CONTROLLED HEATING

ABSTRACT

A method for increasing reliability during a read and/or write operation in a disk drive having a head. Data is read from a disk using a head. An amplitude of a signal obtained during reading the data is measured. A degree of variation in the signal amplitude is determined as a function of a position of the head relative to the disk. The head is selectively heated based on the variation in the signal amplitude for inducing protrusion of the head, thereby selectively reducing a fly height of the head for reducing variations of a read signal created by the head during a read operation and/or magnetic fields created by the head during a write operation.